

I Claim:

1. A method of providing a broadband conferencing service comprising the steps of:

receiving a telephone call from a calling party at a switch in a circuit switched telephone network;

establishing a voice channel over the circuit switched telephone network between a called party and the calling party; and,

automatically establishing a virtual data channel between the called party and the calling party over a packet data network, whereby the virtual data channel established on the packet data network reduces a load on circuit switched telephone network resources.

2. The method of claim 1, wherein the step of establishing a virtual data channel further comprises:

determining a configuration of customer premise equipment (CPE) for the calling party;

determining a configuration of CPE for the called party; and,

establishing the virtual data channel between the calling party and the called party if the configuration of CPE for the calling party is compatible with the configuration of CPE for the called party.

3. The method of claim 1, further comprising the step of launching an application over the virtual data channel, the application capable of interacting with both the calling party and the called party.

4. The method of claim 1, further comprising the calling party sending data to the called party over the virtual data channel.

5. The method of claim 2, wherein the steps of determining the configuration of the calling party's CPE and the called party's CPE comprise interrogating a database having configuration information to determine if the calling party's and called party's CPEs have compatible broadband access capabilities.

6. The method of claim 5, wherein the step of determining configuration of CPE for the calling party comprises the switch communicating with a service control point (SCP) and wherein the database is located at the SCP.

7. The method of claim 1, further comprising the step of establishing a voice channel and a virtual data channel with at least one additional party, wherein the voice channel is established over the circuit switched network and the virtual channel is established over the packet data network.

8. A method of providing broadband access services allowing a voice and data communication between at least two parties comprising the steps of:

- receiving a telephone call from a calling party over a subscriber loop;

- determining compatibility of customer premise equipment (CPE) for broadband access services for the calling party and a called party;

- determining a data address for the calling party and a data address for the called party;

- establishing a voice channel over the subscriber loop; and

- establishing a virtual data channel between the calling party and the called party over a packet data network via the subscriber loop, wherein the voice channel and the virtual data channel share the subscriber loop.

9. The method of claim 8, wherein the subscriber loop is a conventional voice telephone line.

10. The method of claim 8, wherein the data addresses for the called party and the calling party are determined by a service control point (SCP) looking up data addresses associated with the telephone numbers of the called and calling party in a database.

11. The method of claim 10, wherein the data addresses are internet protocol (IP) addresses.

12. The method of claim 11, wherein the step of establishing a virtual data channel comprises the SCP providing the IP address of the calling party to the called party over the packet data network, and providing the IP address of the called party to the calling party over the packet data network.

13. The method of claim 11, further comprising the step of the calling party transmitting data over the virtual data channel using an asynchronous transfer mode (ATM) transmission protocol.

14. The method of claim 8, wherein the step of determining compatibility of CPE for the calling party comprises looking up the CPE capabilities associated with the telephone numbers of the calling party and the called party in a database of subscriber CPEs.

15. The method of claim 8, further comprising the step of adding an additional party to the voice and data communication between the calling party and the called party.

16. The method of claim 15, wherein the step of adding an additional party comprises:

receiving a request from one of the called party and the calling party to connect the voice channel to the additional party;

determining compatibility of CPE for the additional party with CPE for the calling party and the called party;

determining a data address for the additional party; and

connecting the additional party to the virtual data channel by transmitting a data address for the additional party to each of the other parties and transmitting the data addresses of the calling and called parties to the additional party, whereby all parties share information over the virtual data channel concurrently with communications over the voice channel.

17. A system for supporting broadband access services comprising:
a telephone line and a digital data line sharing a first subscriber loop; and

a telephone network in communication with the first subscriber loop, the telephone network comprising:

a first database having a list of telephone numbers and a list of customer premise equipment (CPE) associated with the list of telephone numbers;

a second database having a list of telephone numbers and a list of data addresses associated with the list of telephone numbers; and

means for establishing a virtual data channel between the CPE of at least two parties over a packet data network, the means for establishing a virtual data channel in communication with the first and second database and responsive to voice calls received at the telephone network.

18. The system of claim 17, wherein the digital data line is an asymmetric digital subscriber line (ADSL).

19. The system of claim 18, wherein the first subscriber loop comprises a twisted pair wire.

20. The system of claim 17 further comprising a voice channel connecting a calling party on the first subscriber loop to a called party on a second subscriber loop via the telephone network, and the virtual data channel connecting the called party and the calling party over the first and second subscriber loops via the packet data network.